Project: One-Sample t-Test on Mean    Name: _____________
(You may use this document to submit your assignment by typing in your answers.)
Adam claimed that his average morning pulse rate is 65. A group of his friends do not think so and
took a random sample of 12 morning pulse rates from Adam on 12 randomly selected days. The
data is the following: 69, 66, 67, 68, 66, 72, 75, 68, 68, 66, 68, 69.

The following link has an SPSS example for performing the one-sample t-test:
http://gchang.people.ysu.edu/SPSSE/SPSSOneSampleTTest.pdf
The following link has an SPSS instruction video for performing the one-sample test:
http://gchang.people.ysu.edu/SPSS/TTestOneMean.html

The objective of this research is to see if Adam’s average morning pulse rate is different from
65 per minute. (Perform a one-sample t-test at 5% level of significance.)

Use the pulse rates data above to answer the following questions:

1) State the null and the alternative hypotheses:
   \( H_0: \) __________
   \( H_a: \) __________

2) Is the normality assumption valid? (Verify this using the p-value of the normality test.)

3) What is the value of the t-test statistic: __________

4) What is the value of the p-value of the test: __________

5) Would you reject the null hypothesis and why?

6) Draw a conclusion for this test:

9) If the objective of this research is to see if Adam’s average morning pulse rate is higher
   than 65 per minute, what would be the hypotheses, the p-value of the test and what would
   be your conclusion for the test? (\( \alpha = 5\% \))
   \( H_0: \) __________
   \( H_a: \) __________
   t-test statistic: __________       p-value of the test: __________
   Conclusion: